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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/604,494	07/25/2003	Rodney C. Hope	716909.26	1493
27128	7590	02/01/2006	EXAMINER	
BLACKWELL SANDERS PEPER MARTIN LLP			RIVELL, JOHN A	
720 OLIVE STREET			ART UNIT	
SUITE 2400			PAPER NUMBER	
ST. LOUIS, MO 63101			3753	

DATE MAILED: 02/01/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/604,494

Applicant(s)

HOPE ET AL.

Examiner

John Rivell

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/28/05 (req. for recon).
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 1-6, 11-16 and 25-30 is/are allowed.
- 6) ☒ Claim(s) 7, 9, 10, 17 and 19-21 is/are rejected.
- 7) ☒ Claim(s) 8, 18 and 22-24 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: _____

Applicant's arguments with respect to claims 7, 9, 10, 17, and 19-21, filed November 28, 2005 have been considered but are moot in view of the new ground(s) of rejection.

Claims 1-30 remain pending.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

Claims 7, 9, 10, 17, 19, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cunningham (cited by applicant) in view of Raymond.

The patent to Cunningham, in figure 7, discloses a "self closing valve comprising: a valve body (generally at 36D) having flow passage therethrough; a metal valve seal... having first and second sealing surfaces (at fingers 42D, 43D) disposed within the valve body about a portion of the flow passage; a valve member (34D) mounted within the flow passage for movement between an open position and at least one of at least two closed positions, the valve member having a seating surface (48D) for engagement with at least one of the sealing surfaces of the metal valve seal ring in at least one of the closed positions; a biasing element (spring 36 of figure 1) associated with the valve member for urging the valve member toward the closed positions; and the metal valve

seal... being formed... having first and second annular fingers (at fingers 42D, 43D) extending radially inwardly of the flow passage portion to provide first and second sealing surfaces spaced apart along the longitudinal axis of said portion of the flow passage” as recited in claim 7.

Thus the patent to Cunningham discloses all the claimed features with the exception of having the seal elements at fingers 42D, 43D in the form of an “annular ring” element and having the “first and second sealing surfaces each being coined to each provide a surface portion for mating with a respective portion of the seating surface for selective sealing engagement therewith when the valve member is in a respective at least one of the closed positions”.

Firstly, the patent to Cunningham, in figures 2 and 3 for example, teaches two distinct embodiments of the valve seal in which the seal is in the form of an “annular ring” at 42 in fig. 2 and 42A in fig. 3, for the purpose of permitting the seal element to be replaced and/or repaired in the event its useful life expires.

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in the embodiment of figure 7 of Cunningham, an annular seal element carrying seal “fingers 42D, 43D for the purpose of permitting repair and/or replacement of the seal element in the event its useful life expires as recognized by the embodiments of figures 2 and 3 of Cunningham.

Secondly, the patent to Raymond discloses that it is known in the art to employ a “coining” operation during assembly of a plural seating check valve for the purpose of assuring a very precise fit between the valve seat and seat during normal operation of the valve device (see column 5, lines 6-11).

It would have been obvious at the time the invention was made to a person having ordinary skill in the art to employ in Cunningham a “coining” operation during

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assembly of the valve device prior to normal use for the purpose of assuring a very precise fit between the valve seat and seat during normal operation of the valve device as recognized by Raymond.

Regarding applicants remarks, as they may apply to the above, the patent to Raymond clearly discloses at column 5, lines 6-11 the employment of a coining operation to be performed on the valve head and seat during assembly prior to normal use of the valve device for the purpose of assuring a very precise fit between the valve head and seat during normal use.

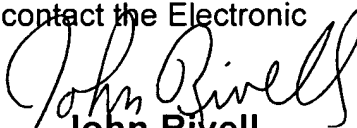
Claims 1-6, 11-16 and 25-30 allowed.

Claims 8, 18, and 22-24 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John Rivell whose telephone number is (571) 272-4918. The examiner can normally be reached on Mon.-Thur. from 6:30am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gene Mancene can be reached on (571) 272-4930. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


John Rivell
Primary Examiner
Art Unit 3753

j.r.